

CLAIMS

I claim:

- [c1] 1. A method in a computer system for providing distributed participants with test data, the method comprising:
- receiving identification of at least one participant computer that will receive the test data;
 - receiving the test data;
 - in response to receiving the test data, sending the received test data to an application program; and
 - sending a display page generated by the application program to each identified participant computer, the display page containing at least a portion of the received test data.
- [c2] 2. The method of claim 1 wherein the test data is received and sent to the application program in real time.
- [c3] 3. The method of claim 1 wherein:
- receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer located in a first location; and
 - sending a display page generated by the application program to each identified participant computer includes sending the display page to a first participant computer and a second participant computer, the first participant computer being located in a second location remote from the first location and the second participant computer being located in a third location remote from the first and second locations.
- [c4] 4. The method of claim 1 wherein receiving identification of at least one participant computer includes receiving identification of at least one

participant computer from a test computer, and wherein the method further comprises sending the display page generated by the application program to the test computer.

[c5] 5. The method of claim 1 wherein:
receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer; and
receiving the test data includes automatically receiving the test data from the test computer, the test data being generated by test equipment operatively connected to the test computer.

[c6] 6. The method of claim 5 wherein the test equipment is an x-ray test machine.

[c7] 7. The method of claim 5 wherein the test equipment is an ultrasonic test machine.

[c8] 8. The method of claim 5 wherein the test equipment is one of an eddy current test machine and an infrared thermal imaging test machine.

[c9] 9. The method of claim 1 wherein receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer, wherein the display page is a first display page, and wherein the method further comprises:

in response to sending the first display page generated by the application program to each identified participant computer, receiving, from at least one participant computer, a comment related to the test data;
and

sending at least a portion of the comment to the test computer.

[c10] 10. The method of claim 9 wherein receiving the comment includes receiving audio content, and wherein sending at least a portion of the comment includes sending audio content.

[c11] 11. The method of claim 9 wherein receiving the comment includes receiving textual content, and wherein sending at least a portion of the comment includes sending textual content.

[c12] 12. The method of claim 1 wherein receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer, wherein the display page is a first display page, and wherein the method further comprises:

in response to sending the first display page generated by the application program to each identified participant computer, receiving, from at least one participant computer, a comment related to the test data;
in response to receiving the comment, sending the received comment to the application program; and
sending a second display page generated by the application program to at least the test computer, the second display page containing at least a portion of the received comment.

[c13] 13. The method of claim 1 further comprising:
receiving a part identifier, wherein the part identifier identifies the part associated with the test data;
in response to receiving the part identifier, retrieving part data associated with the identified part from a database; and
sending the retrieved part data to the application program, wherein the display page generated by the application program includes at least a portion of the retrieved part data.

[c14]

14. The method of claim 1 further comprising:
receiving a part identifier, wherein the part identifier identifies the part associated with the test data;
in response to receiving the part identifier, retrieving part data associated with the identified part from a database; and
sending the retrieved part data to the application program, wherein the display page generated by the application program includes analytical results based at least in part on the received test data and the retrieved part data.

[c15]

15. The method of claim 14 wherein the retrieved part data includes operating conditions.

[c16]

16. The method of claim 14 wherein the retrieved part data includes design details.

[c17]

17. A method in a computer system for providing distributed participants with test data, the method comprising:
receiving identification of at least one participant computer that will receive the test data;
receiving the test data; and
in response to receiving the test data, sending at least a portion of the received test data to each identified participant computer.

[c18]

18. The method of claim 17 wherein the test data is received and sent to the each identified participant computer in real time.

[c19]

19. The method of claim 17 wherein:
receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test conductor located in a first location; and

sending the received test data to each identified participant computer includes sending the test data to a first participant computer located in a second location remote from the first location and a second participant computer located in a third location remote from the first and second locations.

[c20] 20. The method of claim 17 wherein:
receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test conductor operating a test computer; and
receiving the test data includes automatically receiving the test data from test equipment operatively connected to the test computer.

[c21] 21. The method of claim 20 wherein the test equipment is an x-ray test machine.

[c22] 22. The method of claim 20 wherein the test equipment is an ultrasonic test machine.

[c23] 23. The method of claim 20 wherein the test equipment is one of an eddy current test machine and an infrared thermal imaging test machine.

[c24] 24. The method of claim 17 wherein the method further comprises:
in response to sending at least a portion of the received test data to each identified participant computer, receiving, from at least one participant computer, a comment related to the test data.

[c25] 25. The method of claim 24 wherein receiving the comment includes receiving audio content.

[c26] 26. The method of claim 24 wherein receiving the comment includes receiving textual content.

[c27] 27. A method in a computer system for providing test data to distributed participants, the method comprising:

receiving, from a user, identification of at least one participant computer that will receive the test data;
sending the received identification to a server computer;
receiving, from test equipment, the test data; and
in response to receiving the test data, sending the test data to the server computer.

[c28] 28. The method of claim 27 further comprising:

in response to sending the test data to the server computer, receiving, from the server computer, a display page containing at least a portion of the sent test data; and
displaying the received display page.

[c29] 29. The method of claim 27 further comprising:

receiving, from the server computer, a comment related to the test data;
and
presenting the received comment.

[c30] 30. The method of claim 29 wherein the received comment contains audio content.

[c31] 31. The method of claim 29 wherein the received comment contains textual content.

[c32] 32. The method of claim 27 wherein the received test data includes operating parameters of the test equipment.

[c33] 33. The method of claim 27 wherein the test equipment is an x-ray test machine and the test data includes x-ray images.

[c34] 34. The method of claim 27 wherein the test equipment is ultrasonic test equipment and the test data includes ultrasonic images.

[c35] 35. The method of claim 27 wherein the test equipment is an eddy current test machine and the test data includes numerical data.

[c36] 36. The method of claim 27 wherein the test equipment is an infrared thermal imaging test machine and the test data includes thermal images.

[c37] 37. The method of claim 27 further comprising:
receiving, from a user, a control input; and
sending the control input to the test equipment, wherein the test data is received from the test equipment in response to sending the control input to the test equipment.

[c38] 38. The method of claim 27 wherein the received test data is first test data, and wherein the method further comprises:
after receiving the first test data, receiving, from a user, a control input;
sending the control input to the test equipment;
receiving, from the test equipment, second test data; and
in response to receiving the second test data, sending the second test data to the server computer.

[c39] 39. A computer system for providing distributed participants with test data, the computer system comprising:
means for receiving identification of at least one participant computer that will receive the test data;
means for receiving the test data;
means for sending the received test data to an application program in response to receiving the test data; and

means for sending a display page generated by the application program to each identified participant computer, the display page containing at least a portion of the received test data.

[c40] 40. The computer system of claim 39 wherein the test data is received and sent to the application program in real time.

[c41] 41. The computer system of claim 39 wherein:
the means for receiving identification of at least one participant computer includes means for receiving identification of at least one participant computer from a test computer located in a first location; and
the means for sending a display page generated by the application program to each identified participant computer includes means for sending the display page to a first participant computer and a second participant computer, the first participant computer being located in a second location remote from the first location and the second participant computer being located in a third location remote from the first and second locations.

[c42] 42. The computer system of claim 39 wherein:
the means for receiving identification of at least one participant computer includes means for receiving identification of at least one participant computer from a test computer; and
the means for receiving the test data includes means for automatically receiving the test data from the test computer, the test data being generated by test equipment operatively connected to the test computer.

[c43] 43. The computer system of claim 42 wherein the test equipment is an x-ray test machine.

[c44] 44. The computer system of claim 42 wherein the test equipment is an ultrasonic test machine.

[c45] 45. The computer system of claim 42 wherein the test equipment is one of an eddy current test machine and an infrared thermal imaging test machine.

[c46] 46. The computer system of claim 39 wherein the means for receiving identification of at least one participant computer includes means for receiving identification of at least one participant computer from a test computer, wherein the display page is a first display page, and wherein the computer system further comprises:

means for receiving, in response to sending the first display page generated by the application program to each identified participant computer, a comment related to the test data; and
means for sending at least a portion of the comment to the test computer.

[c47] 47. The computer system of claim 46 wherein the means for receiving the comment includes means for receiving audio content, and wherein the means for sending at least a portion of the comment includes means for sending audio content.

[c48] 48. The computer system of claim 46 wherein the means for receiving the comment includes means for receiving textual content, and wherein the means for sending at least a portion of the comment includes means for sending textual content.

[c49] 49. The computer system of claim 39 wherein the means for receiving identification of at least one participant computer includes means for receiving identification of at least one participant computer from a test computer, wherein the display page is a first display page, and wherein the computer system further comprises:

means for receiving, in response to sending the first display page generated by the application program to each identified participant computer, a comment related to the test data;

means for sending, in response to receiving the comment, the received comment to the application program; and

means for sending a second display page generated by the application program to at least the test computer, the second display page containing at least a portion of the received comment.

[c50]

50. The computer system of claim 39 further comprising:

means for receiving a part identifier, wherein the part identifier identifies the part associated with the test data;

means for retrieving, in response to receiving the part identifier, part data associated with the identified part from a database; and

means for sending the retrieved part data to the application program, wherein the display page generated by the application program includes at least a portion of the retrieved part data.

[c51]

51. The computer system of claim 39 further comprising:

means for receiving a part identifier, wherein the part identifier identifies the part associated with the test data;

means for retrieving, in response to receiving the part identifier, part data associated with the identified part from a database; and

means for sending the retrieved part data to the application program, wherein the display page generated by the application program includes analytical results based at least in part on the received test data and the retrieved part data.

[c52]

52. A computer-readable medium whose contents cause a computer system to provide distributed participants with test data, the test data being provided by a method comprising:

receiving identification of at least one participant computer that will receive the test data;

receiving the test data;

in response to receiving the test data, sending the received test data to an application program; and

sending a display page generated by the application program to each identified participant computer, the display page containing at least a portion of the received test data.

[c53]

53. The computer-readable medium of claim 52 wherein:

receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer located in a first location; and

sending a display page generated by the application program to each identified participant computer includes sending the display page to a first participant computer and a second participant computer, the first participant computer being located in a second location remote from the first location and the second participant computer being located in a third location remote from the first and second locations.

[c54]

54. The computer-readable medium of claim 52 wherein:

receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer; and

receiving the test data includes automatically receiving the test data from the test computer, the test data being generated by test equipment operatively connected to the test computer.

[c55] 55. The computer-readable medium of claim 54 wherein the test equipment is an x-ray test machine.

[c56] 56. The computer-readable medium of claim 52 wherein receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer, wherein the display page is a first display page, and wherein the method further comprises:

in response to sending the first display page generated by the application program to each identified participant computer, receiving, from at least one participant computer, a comment related to the test data; and

sending at least a portion of the comment to the test computer.

[c57] 57. The computer-readable medium of claim 56 wherein receiving the comment includes receiving audio content, and wherein sending at least a portion of the comment includes sending audio content.

[c58] 58. The computer-readable medium of claim 56 wherein receiving the comment includes receiving textual content, and wherein sending at least a portion of the comment includes sending textual content.

[c59] 59. The computer-readable medium of claim 52 wherein receiving identification of at least one participant computer includes receiving identification of at least one participant computer from a test computer, wherein the display page is a first display page, and wherein the method further comprises:

in response to sending the first display page generated by the application program to each identified participant computer, receiving, from at least one participant computer, a comment related to the test data;

in response to receiving the comment, sending the received comment to the application program; and

sending a second display page generated by the application program to at least the test computer, the second display page containing at least a portion of the received comment.

[c60]

60. The computer-readable medium of claim 52 further comprising:
receiving a part identifier, wherein the part identifier identifies the part associated with the test data;
in response to receiving the part identifier, retrieving part data associated with the identified part from a database; and
sending the retrieved part data to the application program, wherein the display page generated by the application program includes at least a portion of the retrieved part data.

[c61]

61. The computer-readable medium of claim 52 further comprising:
receiving a part identifier, wherein the part identifier identifies the part associated with the test data;
in response to receiving the part identifier, retrieving part data associated with the identified part from a database; and
sending the retrieved part data to the application program, wherein the display page generated by the application program includes analytical results based at least in part on the received test data and the retrieved part data.

[c62]

62. The computer-readable medium of claim 61 wherein the retrieved part data includes at least one of operating conditions and design details.

[c63] 63. A computer-readable medium containing a display page configured to provide information related to a test being conducted by a test conductor in a first location to a distributed participant in a second location remote from the first location, the display page comprising:

- a part information portion containing information about a part being tested by the test;
- a test equipment information portion containing information about test equipment performing at least a portion of the test;
- a test data portion containing test data resulting from the test; and
- a text box, the text box configured to receive and display textual messages provided by at least one of the test conductor and the distributed participant.

[c64] 64. The computer-readable medium of claim 63 wherein the part information portion includes a part number and a date, the part number identifying the part being tested and the date indicating when the part was first placed in service.

[c65] 65. The computer-readable medium of claim 63 wherein the test equipment information portion includes an equipment number and a date, the equipment number identifying at least one piece of test equipment performing the test and the date indicating when the piece of equipment was last calibrated.

[c66] 66. The computer-readable medium of claim 63 wherein the part information portion includes an identification of the manufacturer and a repair history of the part being tested, and wherein the test equipment information portion includes one or more control settings for at least one piece of test equipment performing the test.

[c67] 67. The computer-readable medium of claim 63 wherein the test data portion includes graphical data and numerical data.

[c68]

68. The computer-readable medium of claim 63 wherein the display page further comprises a voice button, wherein selection of the voice button by one of the test conductor or the distributed participant enables audio content to be sent by the one of the test conductor or the distributed participant to the other of the test conductor or the distributed participant.

[c69]

69. A method in a computer system for allowing a distributed participant to participate remotely in a nondestructive evaluation (NDE) test of a part using NDE test equipment, the method comprising:

receiving NDE test conditions from the NDE test equipment;
sending the received NDE test conditions to the distributed participant;
receiving NDE test data from the NDE test equipment;
sending the received NDE test data to the distributed participant;
receiving an instruction from the distributed participant, the instruction being related to at least one of the NDE test conditions; and
in response to receiving the instruction, controlling the NDE test equipment to alter at least one of the NDE test conditions.

[c70]

70. The method of claim 69 further comprising:
receiving an identification of the NDE test equipment; and
sending the received identification to the distributed participant.

[c71]

71. The method of claim 69 further comprising:
receiving an identification of the part being tested; and
sending the received identification to the distributed participant.